Exhibit 13

[redacted]

Broad portfolio of high-performance, high-density DRAM

16Gb DDR5

Next-generation Memory

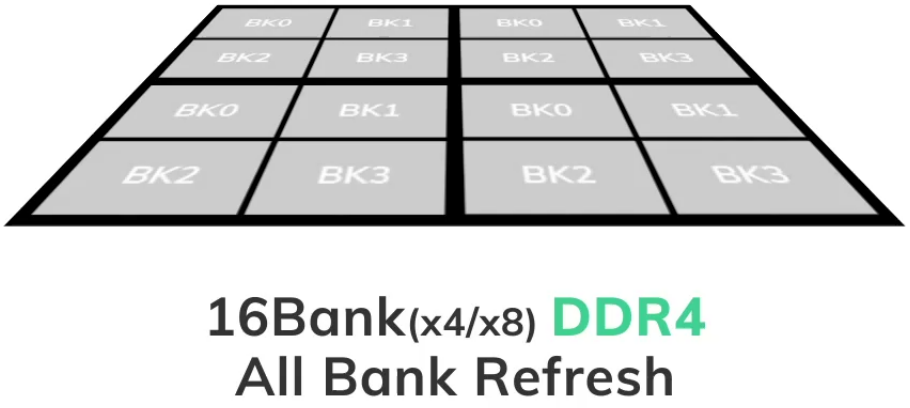
Having developed the industry's first JEDEC-compliant DDR5 DRAM, SK hynix expects to lead the era of next-generation memory with its 16Gb or 24Gb DDR5. The performance enhancements and TCO savings over DDR4 realize greater value for customers, while the 20% smaller power footprint delivers value for the environment and society as well.

Higher DDR5 Speed Lined Up

While 16Gb or 24Gb DDR5 can process data at a rate of 5,600Mbps at present, we aim to achieve faster speeds of above 6,400Mbps with higher density DDR5 in line with the growing demand for greater memory bandwidth.

32 Banks, Dynamic Scalability

DDR5 has double the memory access availability of DDR4 with eight bank groups and 32 banks in its architecture, both twice that of DDR4, supported by the Same Bank Refresh function that allows other banks to be accessed while a specific bank is refreshed in all bank groups.



20% Power Savings

DDR5 is also more efficient, delivering 2x speeds with 1.1V in operating voltage and overall consuming 20% less power than DDR4.

Search by Specs

Application

Product option

Filter

Results

Save All

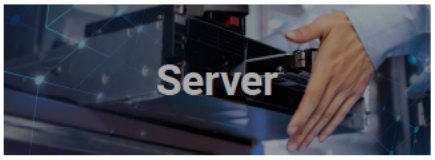
Select 2 more products to Compare

Clear all

Select 2 more products to Compare

Clear all

View Applications



PC

Consumer

Further Materials

VIDEO

The Optimal Solution for Big Data DRAM Solutions

HBM2E

Search by Specs

Fastest DRAM with enhanced heat dissipation

HBM2E

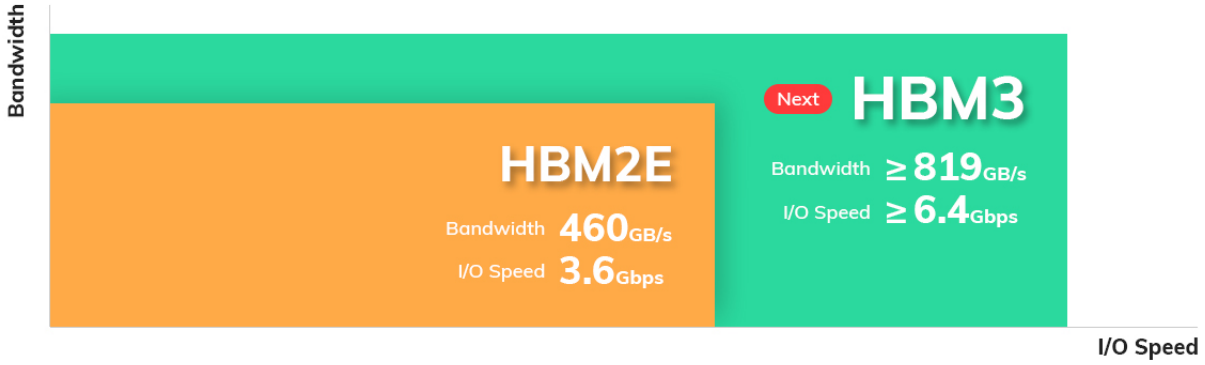
The Fastest DRAM solution

SK hynix's 1ynm 16Gb HBM2E is the industry's fastest memory at 3.6Gbps in I/O speed, processing 460GB of data per second using 1,024 I/Os. With 36% better heat dissipation than the previous HBM2, our new HBM2E is a truly efficient memory with robust performance for your system.

HBM Performance Trend

SK hynix leads the HBM market with ambitious for even faster HBM solutions: Our HBM3, under development, will be capable of processing data at a rate of 819GB/s or higher with 6.4Gbps speeds per pin. With over 2x power efficiency for the same workload as DDR or GDDR, HBM reduces overall TCO – capturing the essence of our Memory ForEST* initiative.

* Memory ForEST:



Thermal Improvement

Our HBM2E has 36% better heat dissipation than HBM2, which allows it to stay on average 14 degrees celsius cooler under the same operating conditions.

Up to 9x Bandwidth, 2x Gen-on-Gen Capacity Improvement

Compared to the 2.4GB/s bandwidth of DDR5 and 64GB/s of GDDR6, HBM2E can perform up to 9x faster, processing 460GB of data per second. HBM2E also doubles the density over the previous-gen HBM2 by realizing a 16GB solution with a combination of eight 16Gb DRAM die, compared to the 8Gb core die density on the HBM2.

Search by Specs

Application

Server Networking Consumer Automotive

Product option

HBM3 HBM2E

Filter

- Density
- 16Gb
- KGSD Density
- 128Gb
- Speed
- 6.0Gbps
- 5.6Gbps
- Package
- 8Hi
- Product Status
- MP
- CS

2 Results **Save All**

Select 2 more products to Compare Clear all

- H5UG7HME03X020R

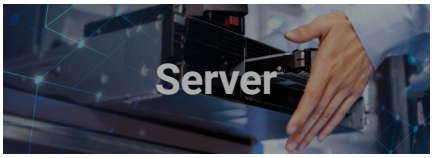
Density
16Gb
KGSD Density
128Gb
Speed
6.0Gbps
Package
8Hi
Product Status
CS

- H5UG7HMD83X020R

Density
16Gb
KGSD Density
128Gb
Speed
5.6Gbps
Package
8Hi
Product Status
MP

Select 2 more products to Compare Clear all

View Applications



Automotive

Further Materials

01 / 03

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SK hynix Automotive Solutions

VIDEO
SK hynix Solutions are designed for your datacente...

VIDEO
HBM2E: LEADING THE MEMORY REVOLUTION

PRESS
Synopsys 3.6Gbps

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RDIMM/LRDIMM

Search by Specs

Ultra-high capacities at industry's lowest power budget

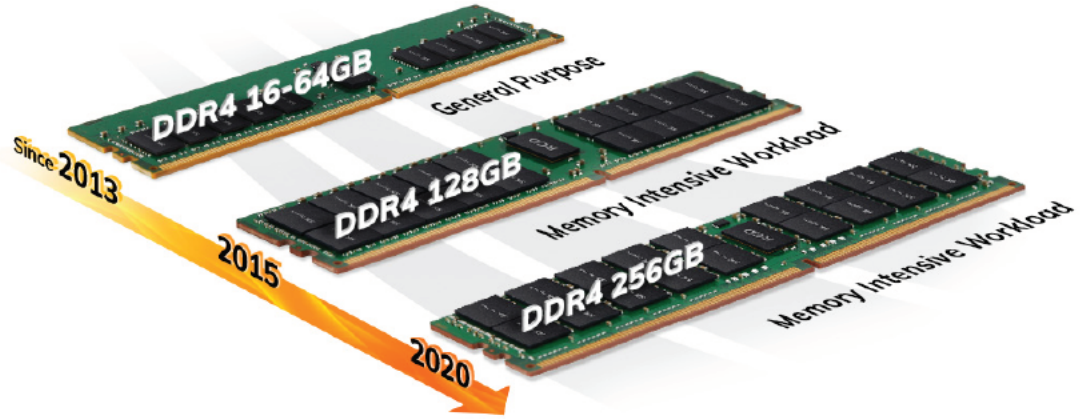
256GB DDR4 RDIMM/LRDIMM

High Density Module

SK hynix develops high-density (128/256GB) RDIMM and LRDIMM modules specialized to process Big Data. Our 256GB RDIMM and LRDIMM based on the 1ynm 16Gb DDR4 support stable data transfers with speeds of 3,200Mbps at 10W, the industry's lowest power budget.

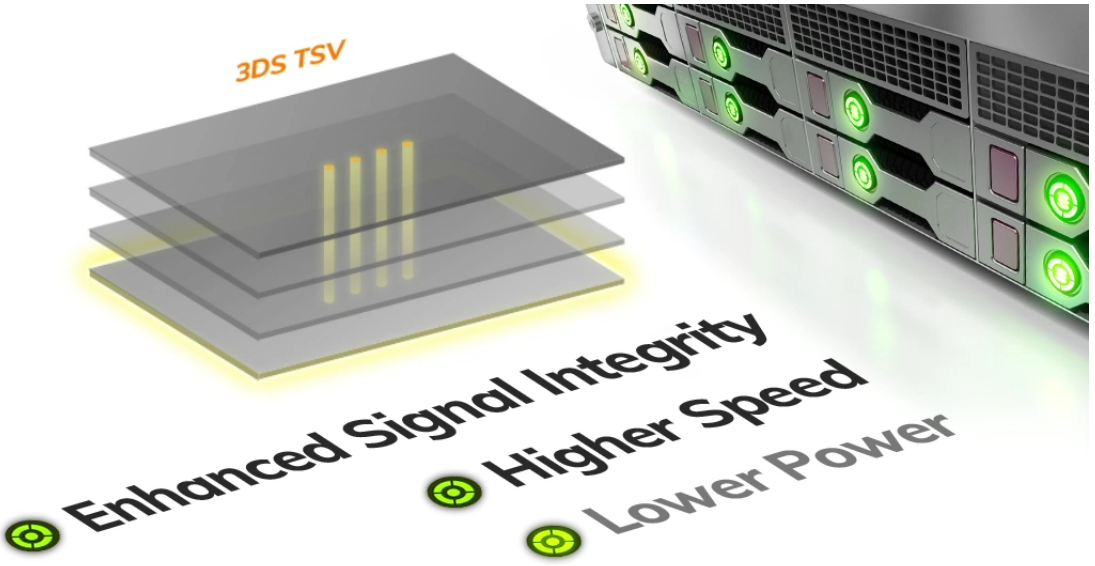
Targeting In-memory Computing

Beyond RDIMM/LRDIMM modules with basic capacities for general applications, SK hynix's High Density Modules deliver faster processing and larger memory needed for in-memory database, cache, and real-time big data analysis.
Our offerings include the 128GB RDIMM/LRDIMM based on 1xnm 16Gb DDR4 technology, now followed by the 256GB RDIMM/LRDIMM that doubles the density with next-generation 1ynm 16Gb DDR4.



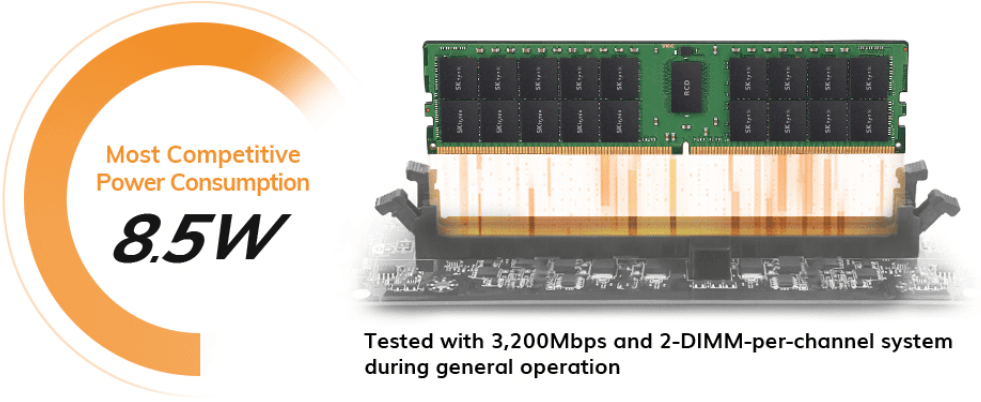
3DS 4Hi Technology

RDIMM/LRDIMM



Industry's Lowest Power Consumption

Our 256GB DDR4 RDIMM consumes around 8.5W of power and LRDIMM around 10.5W, both the most competitive levels in the High Density Module market.



Tested with 3,200Mbps and 2-DIMM-per-channel system during general operation

Search by Specs

Application

Server Networking

Product option

RDIMM/LRDIMM

Density
128GB
64GB
32GB
16GB
Organization
x8
x4
Speed
4800Mbps
Package Type
3DS
SDP
Product Status
CS

28 Results

Save All

Select 2 more products to Compare

Clear all

HMCT04MEERA131N
D MM Type
RD MM
Density
128GB
Organization
x4
Speed
4800Mbps
Package Type
3DS
Product Status
CS

HMCT04MEERA135N
D MM Type
RD MM
Density
128GB
Organization
x4
Speed
4800Mbps
Package Type
3DS
Product Status
CS

HMCT04MEERA129N
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x4
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4800Mbps
Package Type
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Product Status
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HMCG94MEBQA109N
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Organization
x4
Speed
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Package Type
SDP
Product Status
CS

HMCG94MEBRA109N
D MM Type
RD MM
Density
64GB
Organization
x4
Speed

RDIMM/LRDIMM

RD MM
Density
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Organization
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Speed
4800Mbps
Package Type
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Density
32GB
Organization
x8
Speed